

On June 4, 2001 appellant, then a 57-year-old retired forest worker, filed an occupational disease claim alleging that his use of 2-4-5-T, which contained dioxin as a contaminant, was

responsible for his neurological problems. He advised that he first realized his various medical problems were caused or aggravated by his employment on May 8, 2001. Appellant submitted a March 27, 2001 blood test report which he indicated showed exposure to dioxin. Appellant also submitted progress reports and blood tests from Dr. Eldon D. Pence, Jr., a Board-certified internist, from April 2, 1982 to April 27, 2001.

Appellant began working as a forest worker on September 3, 1962. He poured and mixed mist from sprayers, injected trees with herbicide, sprayed under utility lines and along the banks of lakes, creeks, ponds and road sides for brush and weed control. He worked around the chemical 2-4-5-T containing dioxin every day at least six to seven hours per day, five days a week, for approximately eight years. He then changed jobs to equipment operator, which required exposure to the chemical only 30 to 40 days a year, which continued over a period of 10 years. Appellant was last exposed to the chemical irritants on a regular basis on or about 1970 and had a reduced exposure over the next 10 years until 1980. Appellant retired on August 20, 1994. Appellant has numerous medical conditions, including short-term memory problems, confusion, diabetes, neuropathy of the right hand, general weakness and urological problems.

By letter dated July 23, 2001, the Office requested that appellant supply additional factual and medical information, including a comprehensive medical report that described his symptoms, results of examinations and tests, treatment provided and its effects and the physician's opinion with medical reasons on the cause of his condition.

In an August 8, 2001 statement, appellant submitted factual information and also submitted medical reports from various physicians and results from testing. In an August 21, 2001 report, Dr. John L. Kareus, a Board-certified neurologist, indicated that appellant had multiple neurologic problems including excessive fatigue, memory loss and right arm weakness. He also has had abnormal studies, which included an abnormal magnetic resonance imaging (MRI) scan which showed evidence of white matter lesions and evidence of a stroke. Dr. Kareus noted that appellant had been evaluated for demyelinating disease with a lumbar puncture and that the spinal fluid appeared normal. Dr. Kareus stated that it was "entirely possible that some, if not all, of his neurologic symptoms may be in part related to dioxin exposure."

In a September 14, 2001 decision, the Office denied appellant's claim on the grounds that the evidence did not demonstrate that appellant's condition was caused by the employment.

By letter dated January 12, 2002, appellant requested reconsideration. Numerous diagnostic reports, including an October 20, 2001 hair element report, and medical reports from various physicians were submitted along with several documented studies regarding dioxin exposure and peripheral neuropathy.

In an October 30, 2001 report, Dr. Nancy A. Didriksen, a psychologist, evaluated appellant for neurocognitive and personality/behavioral concomitants of toxic exposure. Dr. Didriksen noted appellant's history and diagnosed toxic encephalopathy, dementia due to neurotoxic exposure, and adjustment disorder with mixed anxiety and depressed mood, hypertension, peripheral neuropathy, chronic fatigue, chronic sinusitis and dyspnea.

In an October 31, 2001 report, Dr. Daniel M. Martinez, a Board-certified otolaryngologist, advised that appellant was being seen for “some slight balance problems,” noted appellant’s medical history and set forth examination findings. An impression of vestibular pattern insufficiency of central neurological origin (possibly brainstem) was provided. Dr. Martinez stated that dioxin was capable of affecting the central vestibular tracts, resulting in disequilibrium. He found that appellant’s examination suggested chemical toxicity.

In a December 14, 2001 report, Dr. William J. Rea, a Board-certified surgeon specializing in thoracic surgery and environmental medicine, noted appellant’s medical history and his examination findings. He diagnosed toxic encephalopathy, toxic effects of pesticides and heavy metals, immune deregulation, chemical sensitivity, chronic fatigue and peripheral neuropathy. Dr. Rea opined that appellant’s diagnosis was related to chronic and cumulative exposure to chemicals while at work and that he was totally disabled. He advised that appellant had multi-organ system dysfunction with elevated blood chemical and elevated heavy metals levels. Dr. Rea stated that it was his medical experience that toxic chemical exposures would affect many organ systems and produce a complex medical condition. He stated that appellant’s immune system was deregulated and that he existed in a hypermetabolic and hyper-reactive state. He explained that a patients with a strong sensitivity to a particular substance would cross react with other antigens and that this state had a tendency to deplete nutrient pools, consequently impairing detoxification and resulting in susceptibility to accumulation of chemicals.

In a January 3, 2002 report, Dr. Pence advised that he had followed appellant since April 1982. He noted appellant’s general health deterioration and change in his mental situation with the passage of time and the family’s concern over toxic poisoning due to his dioxin exposure history. Dr. Pence stated that he reviewed the studies completed by Dr. Rea and that he concurred with the conclusion. He found that appellant was affected by some type of toxin which had produced physical and mental changes that had been observed over time, that the conclusions of the environmental medicine study were valid, and that appellant sustained toxic exposure during the time he was actively engaged in the course of his forest service employment.

The Office referred the case record along with a series of questions and a statement of accepted facts to its Office medical adviser. In an April 1, 2002 report, the Office medical adviser advised that the primary diagnosis was idiopathic encephalopathy with a history of exposure to various chemicals in the employing establishment. The Office medical adviser stated that dioxin toxicity studies had not shown a definite relation between work exposure and an encephalopathic disorder. He also stated that the reported dioxin level in appellant was not an inordinately high level and noted that many studied groups with higher levels showed no untoward effects. The Office medical adviser concluded, however, that the fact that the encephalopathy was idiopathic brought out the possibility that the exposure of 40 years could be associated with the present condition, but, was far from conclusive.

The Office referred a statement of accepted facts and the case record, to Dr. Scott E. Hardy, Board-certified in occupational medicine, to conduct a second opinion evaluation. In an August 13, 2002 report, Dr. Hardy reviewed appellant’s work and medical history and provided an extensive discussion. He advised that appellant had a number of conditions including apparent dementia, chronic hypertension, diabetes mellitus and a stroke. Dr. Hardy also noted that appellant also appeared to suffer from dementia with a lowered IQ and memory problems

and noted that there had been no objective test to document a peripheral neuropathy. He stated that many factors could have affected appellant's performance on the multiple psychometric tests. Dr. Hardy also stated that as an encephalopathy and a stroke existed, those conditions could also have affected appellant's symptoms. To diagnose toxic encephalopathy, however, Dr. Hardy stated that much more information must be obtained. He also noted that, in all the categories evaluated with veterans who had high exposure to herbicides in Vietnam, about the same time as appellant's exposure, there was no strong evidence establishing an association between herbicides used in Vietnam, the same ones that appellant worked with, and clinical neurological disorders. Dr. Hardy also stated that other studies have found inadequate or insufficient evidence to determine an association between cognitive and neuropsychiatric effects and exposure to herbicides in Vietnam. He also stated that neurotoxicologic studies did not suggest a strong biologic plausibility for behavior alterations related to herbicide exposure. Dr. Hardy, thus, concluded that there was no strong medical evidence of a direct causation for encephalopathy after exposure to dioxins in general or in this case, specifically, as further research was required. He opined that it was more likely that appellant's current condition arose from the documented cortical infarct and hypertension and diabetes rather than the remote exposure to dioxin. Dr. Hardy stated that dioxin levels measured in appellant did not correlate with any specific neurologic outcomes and noted that, in a variety of studies, individuals with far higher levels than appellant had no central or neurocognitive defects. He stated that there was no established causal relationship between dioxin exposure and encephalopathy based on recent medical literature. Dr. Hardy noted that, although there was some weak evidence that dioxin exposure might be linked with temporary peripheral nerve dysfunction, he stated this would not persist over an extended period of time. He opined that, apart from a significant amount of hearing loss, which was likely aggravated by appellant's employment, there was no evidence of aggravation, acceleration or precipitation of appellant's diabetes mellitus, the peripheral nerve complaints in his right hand, the benign prostatic hypertrophy and renal stones, or any evidence that dioxin exposure precipitated or caused appellant's stroke or dementia. Dr. Hardy further noted that, within the area where appellant resided, there were documented incidents of environmental contamination associated with poultry being fed dioxin contaminated food and resultant contamination of the poultry products. He thus opined that there were potential other sources of dioxin identified in appellant's 2001 blood samples than his federal employment in the 1960s and 1970s. Dr. Hardy concluded by noting that proof of a health affect requires substantially more information and documentation than the association noted in appellant's records.

By decision dated October 22, 2002, the Office denied modification of its earlier decision as the medical evidence did not establish that chemical exposure had caused or contributed to any of the diagnosed conditions.

In an October 21, 2003 letter, appellant requested reconsideration. Appellant submitted several documented studies regarding dioxin exposure; general information on chemicals/herbicides used in appellant's employment and various labels of 2,4,5-T and 2,4-D; legal material, including investigative reports, memorandum, and briefs, pertaining to appellant's own legal case and others. Medical information was also submitted, which included several diagnostic and laboratory results, such as echocardiogram/Doppler reports, MRI scan, and carotid duplex studies; a dioxin testing report on his spouse and numerous progress reports from appellant's physicians noting his condition from 2001 to 2003

In a September 30, 2002 report, Dr. Rea noted appellant's exposure to working with undiluted pesticides and herbicides, his medical history and the results of his examination. He diagnosed toxic encephalopathy, toxic effects of pesticides and heavy metals, immune deregulation, chemical sensitivity, chronic fatigue and peripheral neuropathy. Dr. Rea advised that the diagnosis of chemical sensitivity could be found in the International Coding of Diseases (ICD-9), research for chemical sensitivity has been well recognized, and that chemical sensitivity may be considered a disability.

In a November 13, 2002 report, Dr. Margaret Tremwel, a Board-certified neurologist, reported that appellant had a 20-year period of defoliant toxic exposure. She opined that appellant's examination may either represent a frontal temporal dementia in addition to a frontal subcortical dementing process versus remote effects of prior neurotoxin exposure. Dr. Tremwel opined that since appellant had elevated blood levels of dioxin, despite having been away from that exposure for several decades, she believed that the most likely etiology of his symptoms was the neurotoxin exposure. She expressed doubt that appellant's current condition was vascular in etiology as he has not had a step-wise deterioration, but rather a slow progressive deterioration.

By decision dated January 22, 2004, the Office denied modification of its October 22, 2002 decision as the medical documentation failed to establish that appellant's chemical exposure was caused by or contributed to any of the diagnosed conditions.

### **LEGAL PRECEDENT**

To establish that an injury was sustained in the performance of duty in an occupational disease claim, a claimant must submit the following: (1) medical evidence establishing the presence or existence of the disease or condition for which compensation is claimed;<sup>1</sup> (2) a factual statement identifying employment factors alleged to have caused or contributed to the presence or occurrence of the disease or condition;<sup>2</sup> and (3) medical evidence establishing that the employment factors identified by the claimant were the proximate cause of the condition for which compensation is claimed or, stated differently, medical evidence establishing that the diagnosed condition is causally related to the employment factors identified by the claimant.<sup>3</sup> The evidence required to establish causal relationship is rationalized medical opinion evidence, based upon a complete factual and medical background, showing a causal relationship between the claimed condition and identified factors. The belief of a claimant that a condition was caused or aggravated by the employment is not sufficient to establish causal relation.<sup>4</sup>

The medical evidence required to establish causal relationship generally is rationalized medical opinion evidence. Rationalized medical opinion evidence is medical evidence, which includes a physician's rationalized opinion on the issue of whether there is a causal relationship

---

<sup>1</sup> *Solomon Polen*, 51 ECAB 341 (2000).

<sup>2</sup> *Marlon Vera*, 54 ECAB \_\_\_\_ (Docket No. 03-907, issued September 29, 2003); *Janet L. Terry*, 53 ECAB \_\_\_\_ (Docket No. 00-1673, issued June 5, 2002); *Roger Williams*, 52 ECAB (2001).

<sup>3</sup> *Ernest St. Pierre*, 51 ECAB 623 (2000).

<sup>4</sup> *Luis M. Villanueva*, 54 ECAB \_\_\_\_ (Docket No. 03-977, issued July 1, 2003).

between the claimant's diagnosed condition and the implicated employment factors.<sup>5</sup> The opinion of the physician must be based on a complete factual and medical background of the claimant,<sup>6</sup> must be one of reasonable medical certainty<sup>7</sup> and must be supported by medical rationale explaining the nature of the relationship between the diagnosed condition and the specific employment factors identified by the claimant.<sup>8</sup>

### ANALYSIS

The Office accepted that appellant was exposed to chemical irritants which contained dioxin in his federal employment. The critical issue in the present case is the causal relationship between appellant's exposure to chemical irritants, which contained dioxin, in his workplace and his medical conditions.

Appellant submitted multiple medical reports from several doctors with expertise in internal medicine, neurology, otolaryngology, and environmental medicine who generally advised that dioxin or neurotoxin exposure was capable of producing appellant's symptomatology or medical conditions. In a December 14, 2001 report, Dr. Rea, a Board-certified surgeon specializing in environmental medicine, diagnosed toxic encephalopathy, toxic effects of pesticides and heavy metals, immune deregulation, chemical sensitivity, chronic fatigue and peripheral neuropathy and opined that such diagnoses were related to appellant's chronic and cumulative exposure to chemicals while at work and that he was totally disabled. Dr. Rea stated that it was his experience that toxic chemical exposure would affect many organ systems and produce a complex medical condition. He explained that appellant's immune system was deregulated and that he existed in a hypermetabolic and hyper reactive state, which impaired detoxification and resulted in a susceptibility to accumulation of chemicals.

In denying appellant's claim, the Office relied on the August 13, 2002 report from Dr. Hardy, a Board-certified specialist in occupational medicine, who opined that it was more likely that appellant's current conditions arose from his documented cortical infarct, hypertension and diabetes rather than the remote exposure to dioxin. He advised that appellant had an encephalopathy (a disorder of the brain), which would effect the multiple conditions appellant was suffering from (apparent dementia, chronic hypertension, diabetes mellitus, stroke, urologic problems, and complaints consistent with a peripheral neuropathy in the right hand). Based on current medical literature, Dr. Hardy opined that there was no established causal relationship between dioxin exposure and an encephalopathy diagnosis to support either cognitive, neuropsychiatric and/or behavior alterations related to herbicide exposure in general or in this case, specifically. He noted that appellant's dioxin level did not correlate with any specific neurologic outcomes and advised that in a variety of studies individuals with far higher levels of dioxin than appellant had no central or neurocognitive defects.

---

<sup>5</sup> *Conard Hightower*, 54 ECAB \_\_\_\_ (Docket No. 02-1568, issued September 9, 2003).

<sup>6</sup> *Tomas Martinez*, 54 ECAB \_\_\_\_ (Docket No. 03-396, issued June 16, 2003).

<sup>7</sup> *John W. Montoya*, 54 ECAB \_\_\_\_ (Docket No. 02-2249, issued January 3, 2003).

<sup>8</sup> *Judy C. Rogers*, 54 ECAB \_\_\_\_ (Docket No. 03-565, issued July 9, 2003).

Section 8123(a) of the Federal Employees' Compensation Act provides in pertinent part: "If there is disagreement between the physician making the examination for the United States and the physician of the employee, the Secretary shall appoint a third physician who shall make an examination."<sup>9</sup> When there are opposing reports of virtually equal weight and rationale, the case must be referred to an impartial medical specialist, pursuant to section 8123(a) of the Act, to resolve the conflict in the medical evidence.<sup>10</sup>

The Board finds that there is a conflict in the medical evidence between Dr. Hardy, who served as an Office referral physician, and Dr. Rea, appellant's physician and a Board-certified surgeon specializing in environmental medicine, regarding whether there was a causal relationship between appellant's medical conditions and his exposure to toxic chemicals. Consequently, the case must be referred to an impartial medical specialist to resolve the conflict in the medical opinion evidence between Drs. Hardy and Rea. On remand the Office should refer appellant, along with the case file and the statement of accepted facts, to an appropriate specialist for an impartial medical evaluation and report including a rationalized opinion on this matter. After such further development as the Office deems necessary, the Office should issue an appropriate decision regarding appellant's claim.

### **CONCLUSION**

The Board finds that the case is not in posture for decision due to a conflict in the medical evidence.

---

<sup>9</sup> 5 U.S.C. § 8123(a).

<sup>10</sup> *William C. Bush*, 40 ECAB 1064, 1075 (1989).

**ORDER**

**IT IS HEREBY ORDERED THAT** the decision of the Office of Workers' Compensation Programs' dated January 22, 2004 is set aside and the case remanded for further development consistent with the above opinion.<sup>11</sup>

Issued: January 10, 2005  
Washington, DC

Alec J. Koromilas  
Chairman

David S. Gerson  
Alternate Member

Michael E. Groom  
Alternate Member

---

<sup>11</sup> On appeal, appellant also claims that his hearing loss and skin problems were the result of his federal employment. Appellant has not filed a claim for these conditions. As there is no final decision before the Board on these matters, the Board does not have any jurisdiction to review whether appellant's hearing and skin conditions are employment related. 20 C.F.R. § 501.2(c). Appellant may file the appropriate claim form with the Office.